### **QUESTIONS FROM CMM CONFERENCE**

#### 1. How does CMM differ from ISO?

Although there are many similarities between ISO 9001 and the CMM<sup>O</sup>, they are not the same. See "A Comparison of ISO9001 and the Capability Maturity Model," CMU/SEI-94-TR-12 for details. This document can be located on the SEI Internet Home Page - http://www.sei.cmu.edu

2. If a company has an ISO 9000 certification, what steps are required to obtain a CMM 2 certification?

ISO 9000 certification and CMM Level 2 maturity rating are different items. CMM rating is achieved via a Software Capability Evaluation performed by an SEI authorized team.

3. What is the cost range for a firm to be Level II?

Too many variables involved to state a specific cost that would apply generically to any organization. SEI and others have published publicly available cost data.

(Ram Prasad, ITS Services, Inc.) The cost varies with the organization. In our case, it was less than \$100,000 for external help, but it depends on the organization's culture and what they want to do. Do they already have some mature practices? Do they outsource some of their work? ITS Services, Inc. outsources very little.

4. For IRS/Customs: Is it true that subcontractors providing team augmentation services at the Prime's (large business) site do not have to be at CMM Level 2?

(Guy Taylor, U.S. Customs Services) At Customs, the subcontractors providing team augmentation services at the Prime's site must be CMM Level 2 or higher.

(IRS) At IRS, responsibility is placed upon the prime contractor to ensure that the subcontractor follows the prime's CMM policies and procedures. The IRS verifies that the prime contractor is CMM Level 2 compliant.

5. When will the new CMM that Gus Taylor referred to be implemented?

(Guy Taylor, U.S. Customs Services) The CMMi will integrate all the CMMs to the extent possible. The SEI task force to build the CMMi includes membership from the military services, civil government agencies, and private companies. A draft version of the CMMi was distributed to the public for review. The first official publishing is scheduled for release, I believe, in August. At that point they plan to also release the assessment methodology and some training materials. The taskforce is still responding to some of the 3,000 comments received, so the document will be updated after the first release. It is recommended that an organization's transition to the CMMi is gradual.

6. I'm confused. Does the small business procure and pay for a SCE or is it the contracting agency? Are there circumstances under which the contractor obtains and pays for a SCE?

(Guy Taylor, U.S. Customs Services) At Customs, the Contractor does not pay for the SCE. Their only costs incurred are the time required for interviewing their personnel and the space required to do the interviews. (Bill Bickelman, U.S. Customs Services) We are considering a mentor-protégé program where the prime contractor assists their small business or minority-owned business subcontractors with their CMM capabilities.

At the IRS, each solicitation will specify the criteria required in order to obtain a contract award. Primarily, it's been the responsibility of the contractor to obtain and pay for the SCE(s). The bidders for the TIPPS2 contract obtained and paid for their own SCEs. This included small businesses. However, the small business contractors were given a one-year ramp up period following contract award to complete their SCE and submit CMM Level 2 certification to the IRS. The IRS CMM Review Team has performed SCEs on contractors as a part of their monitoring process. These contractors have been previously certified as CMM Level 2 or higher.

7. How does someone become an assessor or evaluator? How time consuming? How much money?

(Guy Taylor, U.S. Customs Services) First you must have training from a SEI authorized provider. After that, you must participate in two CBA-IPIs or two SCEs, depending whether you want to be an assessor or evaluator. Now you are qualified to go to lead assessor or lead evaluator training. You must also have ten years experience in software development, plus meet some other requirements. Next, you lead an assessment or evaluation with an existing certified lead. The lead either approves or disapproves you, based on your performance during the assessment or evaluation.

The SEI website contains additional information regarding this question.

8. Did you consider establishing Organization Policies and Procedures at the beginning? Or was the first project doing the Organization Policies and Procedures?

Policies and procedures need to be developed for the portion of the organization that is embarking on process improvement. How high up in the organization the policies and procedures are developed for initially depends on the scope of the process improvement effort.

9. Do you have measured results of your process improvements? - like quality, schedule, etc. improvements.

(Guy Taylor, U.S. Customs Services) At Customs, we have just started and we have not acquired this information.

The SEI website contains additional data relating to measures. The sources of this data are both from SEI and other companies (published at conferences, etc.)

## 10. Does the IRS require a subcontractor to be CMM Level 2 certified?

The prime contractor is required to show that they are CMM level 2 certified. It is the prime contractor's responsibility to ensure their subcontractors are CMM level 2 certified.

11. Would you recommend a single individual should be designated as CMM "CZAR" for tracking plan accomplishments, or should it be a group effort?

Depending on the size of the organization, it can be an individual or a group. The key is that they are planned and accomplishments tracked.

# 12. How does LOGOS help or work with Small Businesses?

Our specific area of work concerns small projects, small organizations and small businesses. We have been championing the concerns of small businesses since 1991. We have tailored the CMM to make it easier for small businesses to use. SEI granted us the copyright release, and we have published this document.

We support small businesses by helping them generate processes that fit their business goals. We keep it small and appropriate to what they are doing. We do training and assessments. We use a mini-assessment called a SWAP, rather than doing a full-blown CBA-IPI which is very expensive and time consuming. The output from the SWAP is in the same format of a CBA-IPI. However, the information generated may be more useful to the small business because it looks at their corporate goals, process improvement goals, and incorporates the feedback received from the employees as to what they want to keep and to change within the organization.

13. What is LOGOS business classification? For example, SB, Large, etc.

We are classified as a small business, women-owned.

## 14. What is LOGOS' core competency area?

We specialize in software process improvement for small projects and small organizations. Also, we are heavily involved in training and consulting in software process improvement, requirements analysis, front-end design, implementation and project management. We specialize in any of the CMM Level 2 and Level 3 Key Process Areas (KPAs).

15. Is MS Project and Risk Assessment enough for project planning? What other minimum tools are required?

(LOGOS) Some companies don't use any tools. It would be fairly difficult for a large company not to use any tools. We often see companies use MS Project. Large companies with small project use more elaborate tools. We don't often see tools for risk assessments. We don't often see risk assessments which should be done. A lot of minimum tools we see used are particularly in the areas of CM and QA.

The Software Project Planning (SPP) KPA list the goals and things you have to do to satisfy the CMM. Whether you use tools to support the process is up to you. A tool like MS Project is not sufficient to support the SPP KPA.

Tools are not required for any process activity. The processes can be performed manually. If tools are used, they should conform to the processes and not vice versa.

16. From an auditing perspective, how do you recommend files and documents to be organized?

(LOGOS) Organize your files and documents in a manner that works best for your organization. What we have found is that people will not use the information if it can't be easily accessed; e.g., a difficult to use lessons learned databases. Also, ensure there is a good table of contents, so information is easy to locate. Get together with the people in your organization and have them help organize the information; identify their needs; and, develop the requirements. If it is something significantly different than the CMM, be sure to have some sort of table or document mapping for when an assessor comes. We use a worksheet table that lists the KPAs, practices, plans, procedures, and other artifacts that have to be generated. When an assessor comes, you can hand them the table; this allows them to easily locate, e.g., "Document X" and identify it as the plan for the project. Also, the table can identify the Internet addresses where documents are located.

Documents and files should be logically grouped and a simple system used to log and locate them. The better the organization of these items, the easier it will be to conduct the audits.

17. It seems like all organizations, however small are at least level 1 according to the level 1 definition? Is it true?

Yes.